CLAIMS

1. A surgical instrument adapted to contact tissue of a patient and to provide traction with the tissue so as to inhibit migration of the instrument relative to the tissue, the surgical instrument comprising:

a substrate having a particular surface adapted to face the tissue of the patient;

a multiplicity of bristles each having a column strength and extending outwardly of the particular surface, the bristles being adapted for disposition relative to the tissue in a contacting relationship with the tissue; and

each of the bristles having a generally straight configuration so that the force of the bristles on the tissue is enhanced by the column strength of the bristles thereby providing increased traction between the instrument and the tissue.

2. The surgical instrument recited in Claim 1 wherein the bristles are disposed transverse to the particular surface of the substrate.

3. The surgical instrument recited in Claim 2 wherein the bristles are disposed generally perpendicular to the particular surface of the substrate.

4. The surgical instrument recited in Claim 1 wherein the bristles include:

a first group of bristles disposed at a first angle to the particular surface of the substrate;

a second group of bristles disposed at a second angle to the particular surface of the substrate; and

the first angle being different than the second angle.

5. The surgical instrument recited in Claim 1 wherein the bristles include:

a first group of bristles forming a first discrete patch of the bristles;

a second group of bristles forming a second discrete patch of the bristles; and

the first patch of bristles being spaced from the second patch of bristles.

6. The surgical instrument recited in Claim 1 wherein the bristles are embedded in the substrate.

7. The surgical instrument recited in Claim 1 further comprising:

a cover fixed to the substrate and extending over the particular surface;

portions of the cover defining a plurality of holes with each of the bristles extending through an associated one of the holes; and

the cover having characteristics for being compressed relative to the particular surface in order to expose a greater length of the bristles through the associated holes.

8. The surgical instrument recited in Claim 1 further comprising:

at least one of the bristles having a fixed end and a free end; and

a bulb formed on the free end of the at least one bristle.

9. The surgical instrument recited in Claim 4 wherein the first group of bristles is spaced from the second group of bristles.

10. The surgical instrument recited in Claim 9 wherein the first group of bristles in intermingled with the second group of bristles.

11. A surgical instrument adapted to contact tissue of a patient and to provide traction with the tissue so as to inhibit migration of the instrument relative to the tissue, the surgical instrument comprising:

a support formed of a generally rigid material;

a pad disposed in fixed relationship with the support and having a particular surface facing away from the support, the particular surface having first traction characteristics with the tissue; and

in a plurality of discrete elements disposed to extend outwardly of the particular surface of the pad and to provide a tissue contacting surface with an irregular configuration, the tissue contacting surface being adapted to provide the pad with second traction characteristics with the tissue.

12. The surgical instrument recited in Claim 11 wherein the discrete elements are formed integral with the pad.

13. The surgical instrument recited in Claim 11, wherein:

the pad is formed of a first material;

the discrete elements are embedded in the pad and formed of a second material;

the second material; and

is different than the first material.

14. The surgical instrument recited in Claim 11 wherein the discrete elements include a multiplicity of granules.

15. The surgical instrument recited in Claim 11 wherein the discrete elements comprise a multiplicity of loops formed by a single fiber arranged in random configuration and disposed outwardly of the particular surface of the pad.

16. The surgical instrument recited in Claim 14 wherein the granules are embedded in the pad.

17. A surgical instrument adapted to contact the tissue of a patient and to provide traction with the tissue, the surgical instrument comprising:

a support;

a pad disposed in fixed relationship with the support and having a particular surface facing away from the support, the particular surface having first traction characteristics with the tissue;

a multiplicity of elements disposed to extend outwardly of the particular surface of the pad and to provide a tissue contacting surface with an irregular configuration; and

the discrete elements forming multiple projections arranged in a pattern to form the tissue contacting surface and to provide the tissue contacting surface with second tractions greater than the first traction characteristics.

18. The surgical instrument recited in Claim 17 wherein each of the projections has an axis, and a radial cross-section with one of a polygonal and irregular configuration.

19. The surgical instrument recited in Claim 18 wherein the axis of at least one of the projections is disposed at an angle to the particular surface of the pad.

20. The surgical instrument recited in Claim 17 wherein the pattern of the projections provides traction with the tissue of a first magnitude in a first direction and provides traction with the tissue of a second magnitude in a second direction; and

the first magnitude being different that the second magnitude and the first direction being different than the second direction.

21. The surgical instrument recited in Claim 20, wherein:

the axises of the projections are disposed at an angle relative to the particular surface of the pad with the projections extending generally in the first direction; and

the first magnitude is greater than the second magnitude.

22. The surgical instrument recited in Claim 17, wherein:

at least one of the projections has an axis extending between a first end and a second end, the first end being disposed in proximity to the particular surface of the pad with the second end extending outwardly of the pad; and

the projection having a radial cross-section decreasing in area with progressive positions from the first end of the projection to the second end of the projection.

23. A surgical instrument adapted to contact tissue of a patient and to provide traction with the tissue, the surgical instrument comprising:

a support structure;

a resilient pad having a fixed relationship with the support structure;

portions of the pad defining an outer surface of the pad, the outer surface being adapted to contact the tissue; and

at least the portions of the pad having hydrophilic characteristics for withdrawing moisture from the tissue to increase the traction between the instrument and the tissue.

24. The surgical instrument recited in Claim 23 wherein the outer surface of the pad has an irregular configuration.

25. The surgical instrument recited in Claim 24 wherein the portions of the pad include a multiplicity of granules.

26. The surgical instrument recited in Claim 23 wherein the portions of the pad form a multiplicity of discrete elements adapted to contact the tissue.

27. The surgical instrument recited in Claim 26 wherein the discrete elements are integral with the pad.

28. The surgical instrument recited in Claim 27, wherein:

the pad has a generally planer configuration; and

the discrete elements are disposed at an angle to the plane of the pad.

29. The surgical instrument recited in Claim 26 wherein the discrete elements include a multiplicity of loops formed by a single, continuous fiber.

30. The surgical instrument recited in Claim 26 wherein the discrete elements include at least one fiber having a generally straight configuration throughout its length and being adapted to extend into contact with the tissue.

31. A surgical instrument, comprising:

a pair of elongate jaws having inner surfaces which face each other and outer surfaces which face away from each other;

at least one resilient pad disposed on one of the inner or outer surfaces of one of the jaws and being adapted to contact tissue of a patient with a degree of traction sufficient to inhibit migration of the instrument relative to the tissue; and

the pad having a tissue contacting surface with an irregular configuration for enhancing the traction between the surgical instrument and the tissue.

32. The surgical instrument recited in Claim 31 wherein the pad with the irregular surface is disposed on an inner surface of the one jaw and the instrument is adapted to function as a retractor.

33. The surgical instrument recited in Claim 31 wherein the pad with the irregular surface is disposed on the outer surface of the one jaw and the instrument is adapted to function as a spreader.

34. The surgical instrument recited in Claim 31 wherein the pad is disposed to extend between the inner surfaces of the jaws to form a web, and the instrument is adapted to function as an organ stabilizer.